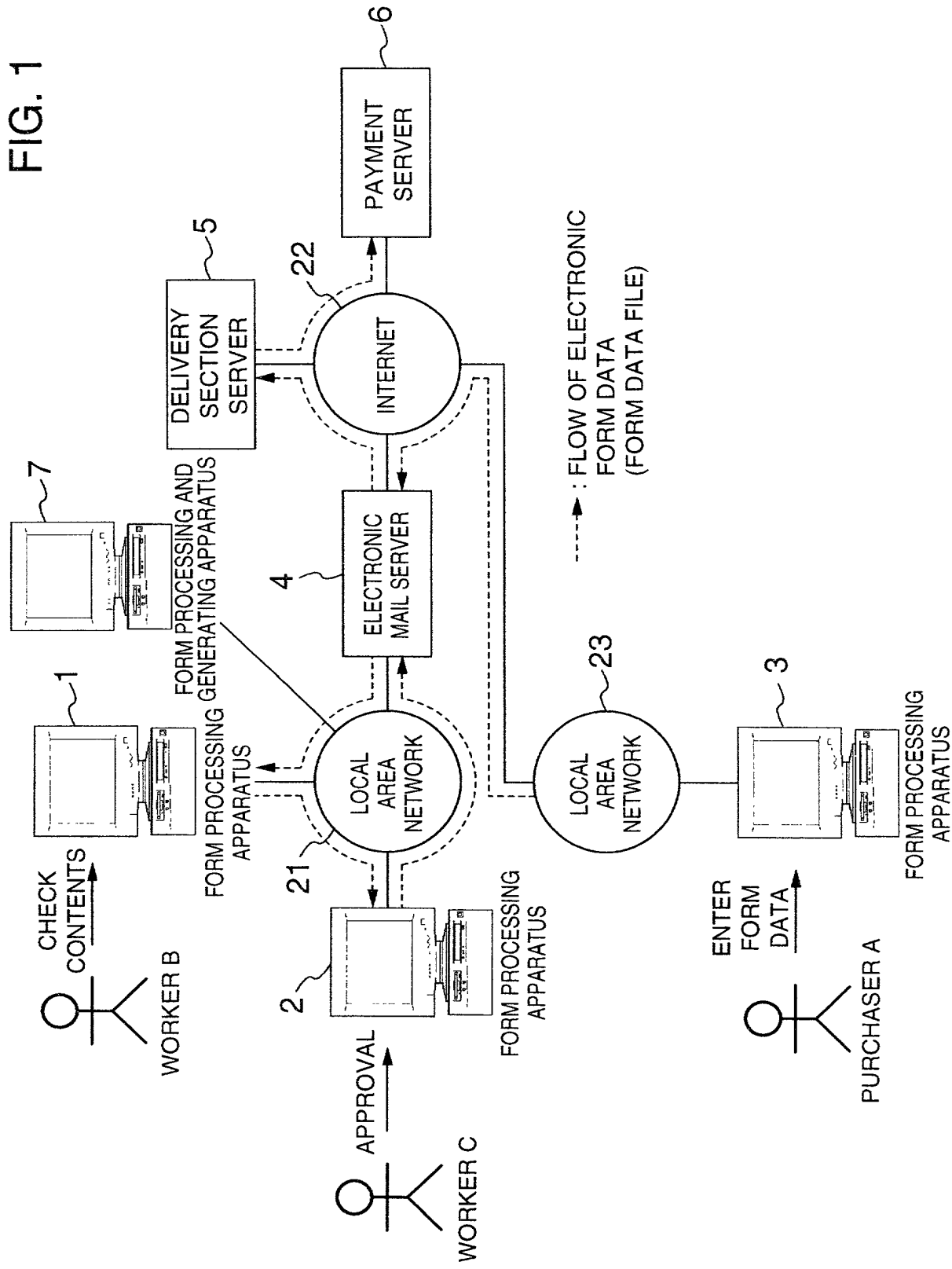


FIG. 1



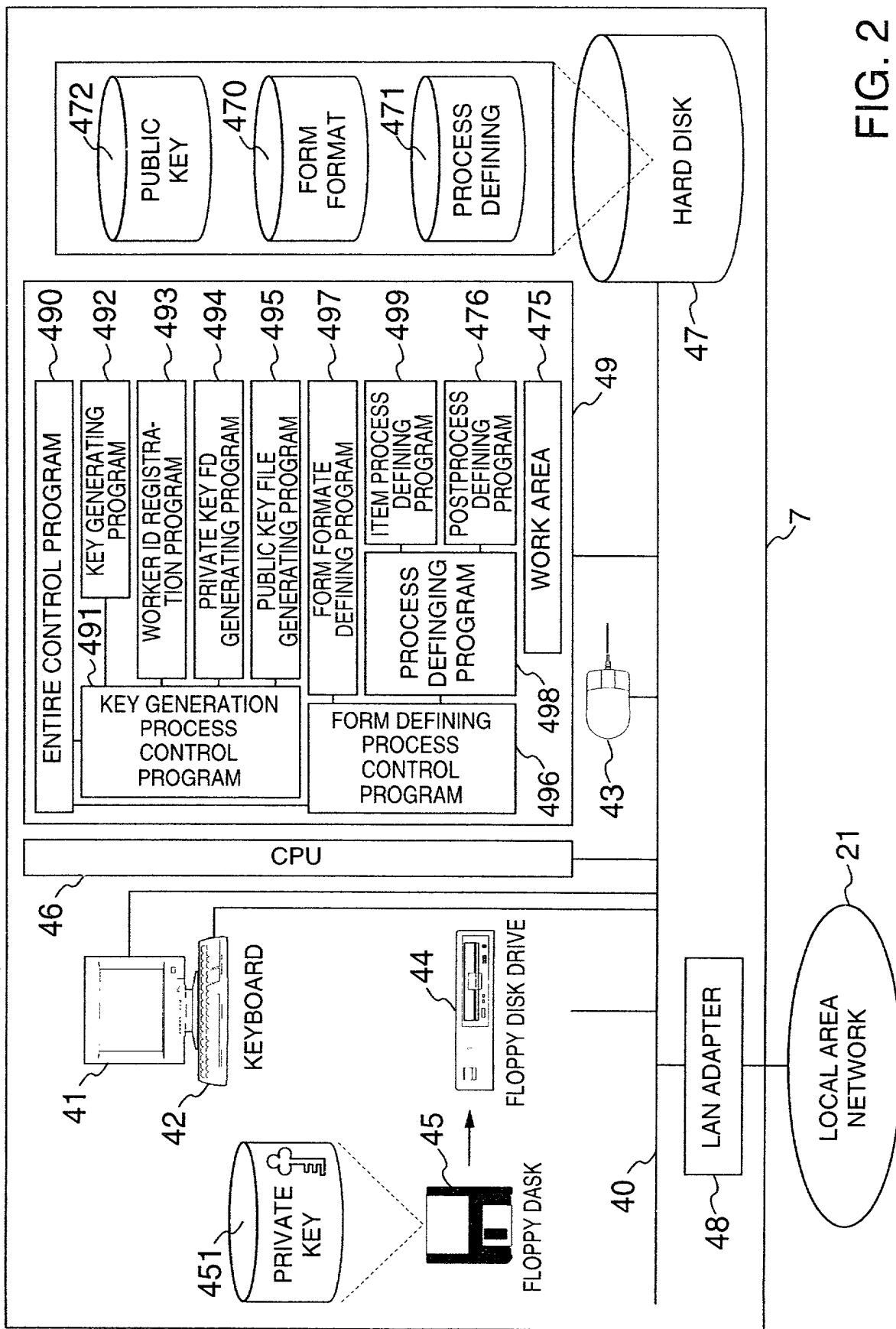


FIG. 2

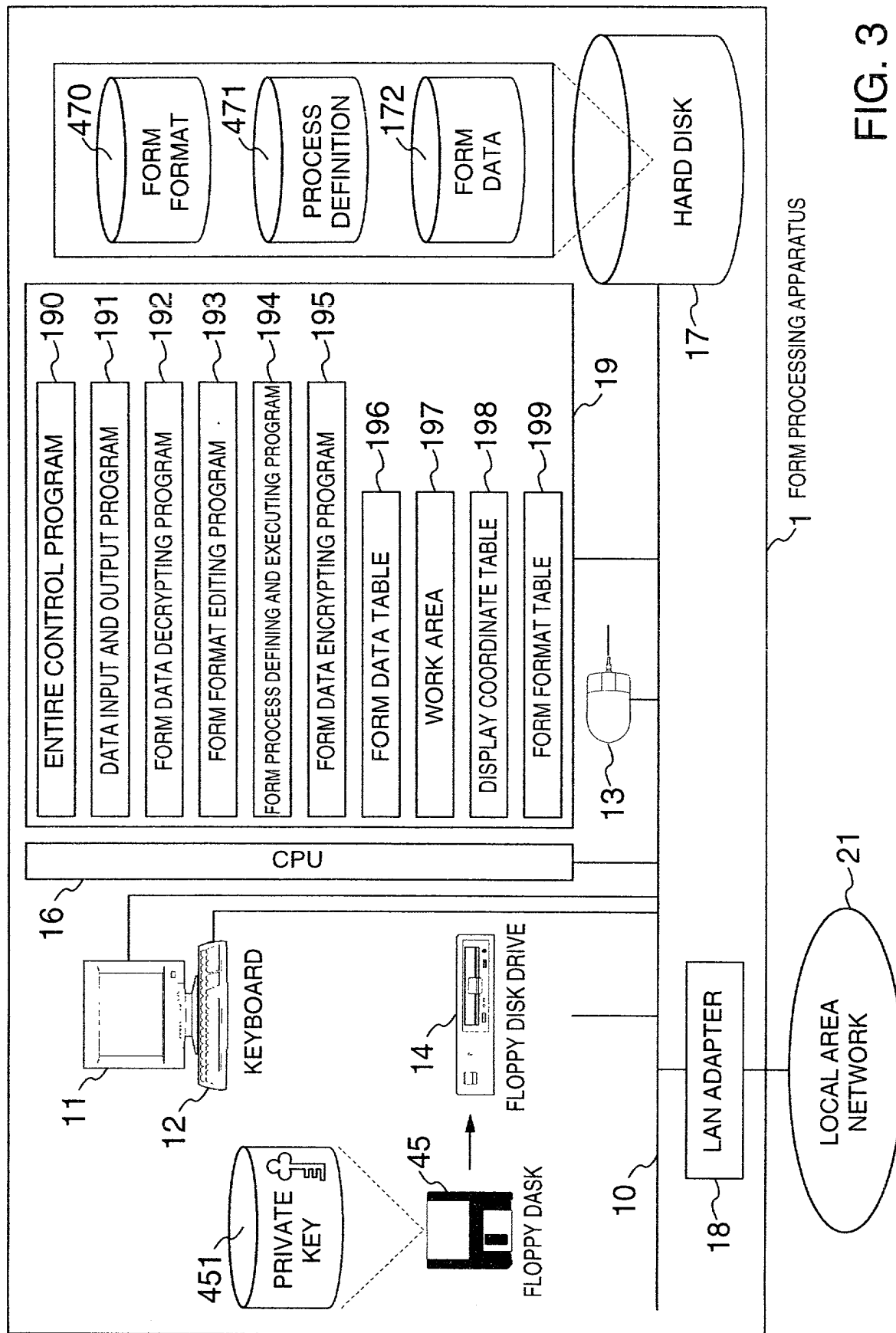


FIG. 4

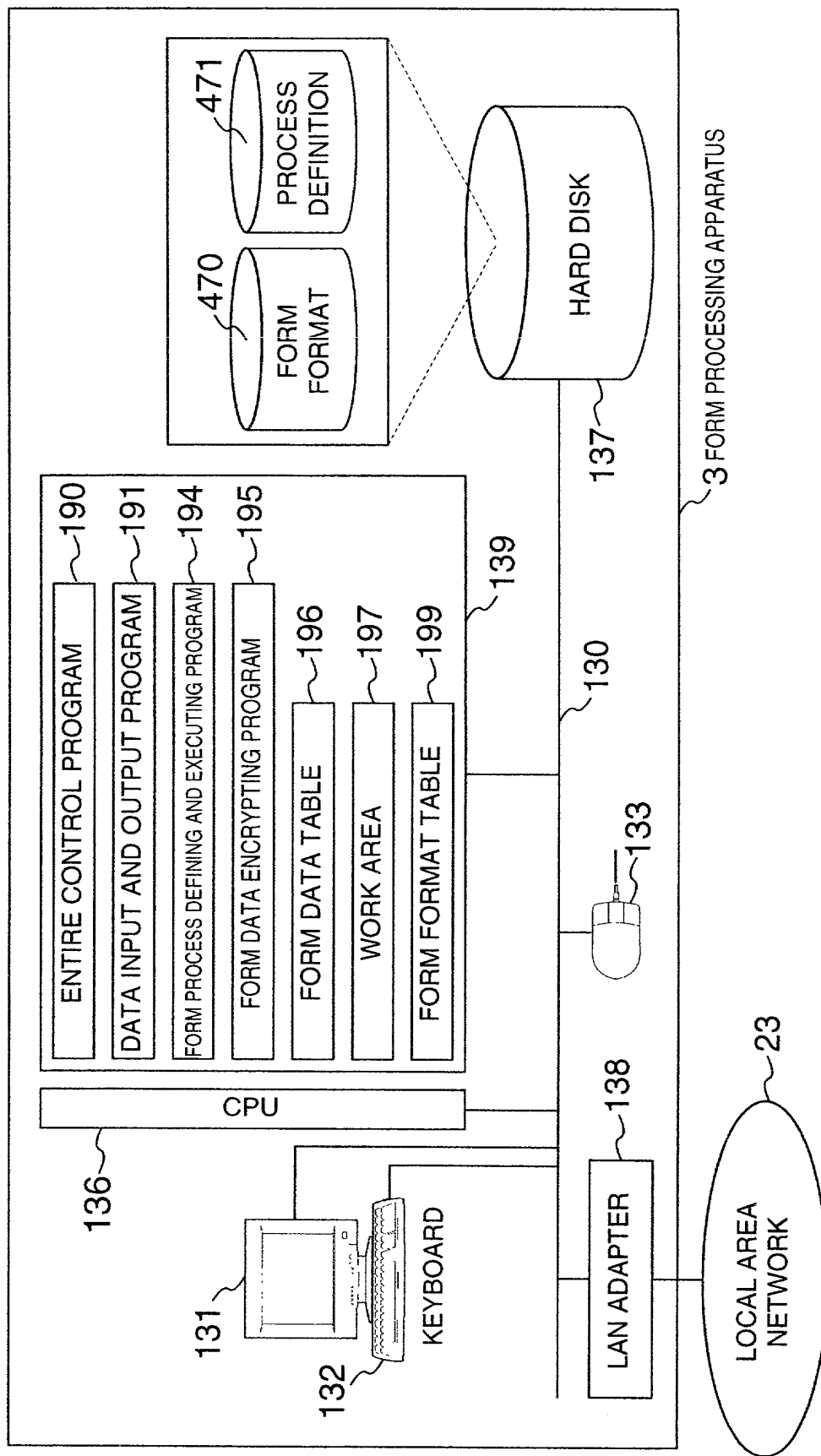


FIG. 5A

PRIVATE KEY FILE 451

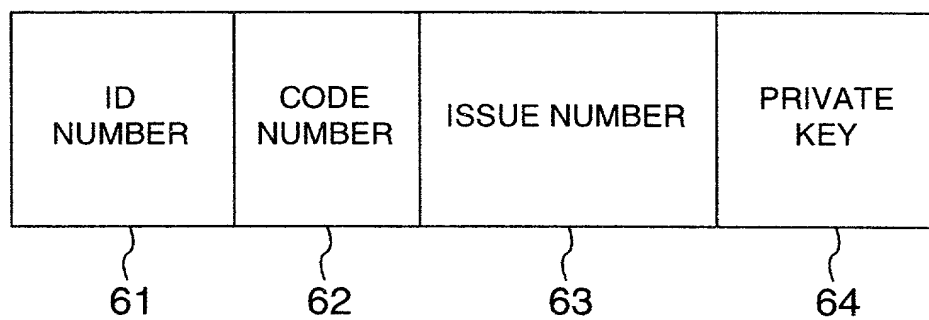


FIG. 5B

PUBLIC KEY FILE 451

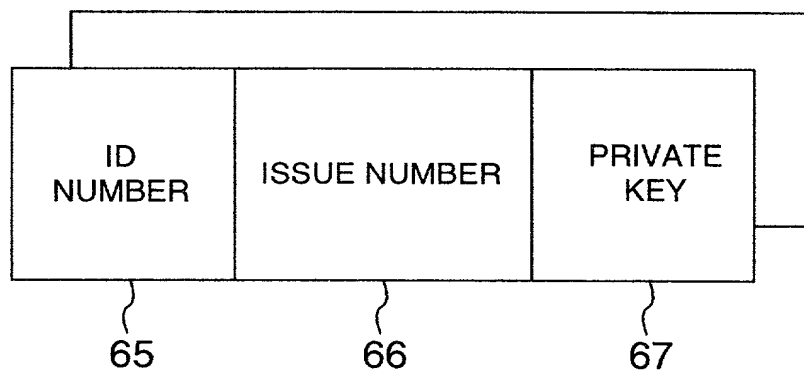


FIG. 6

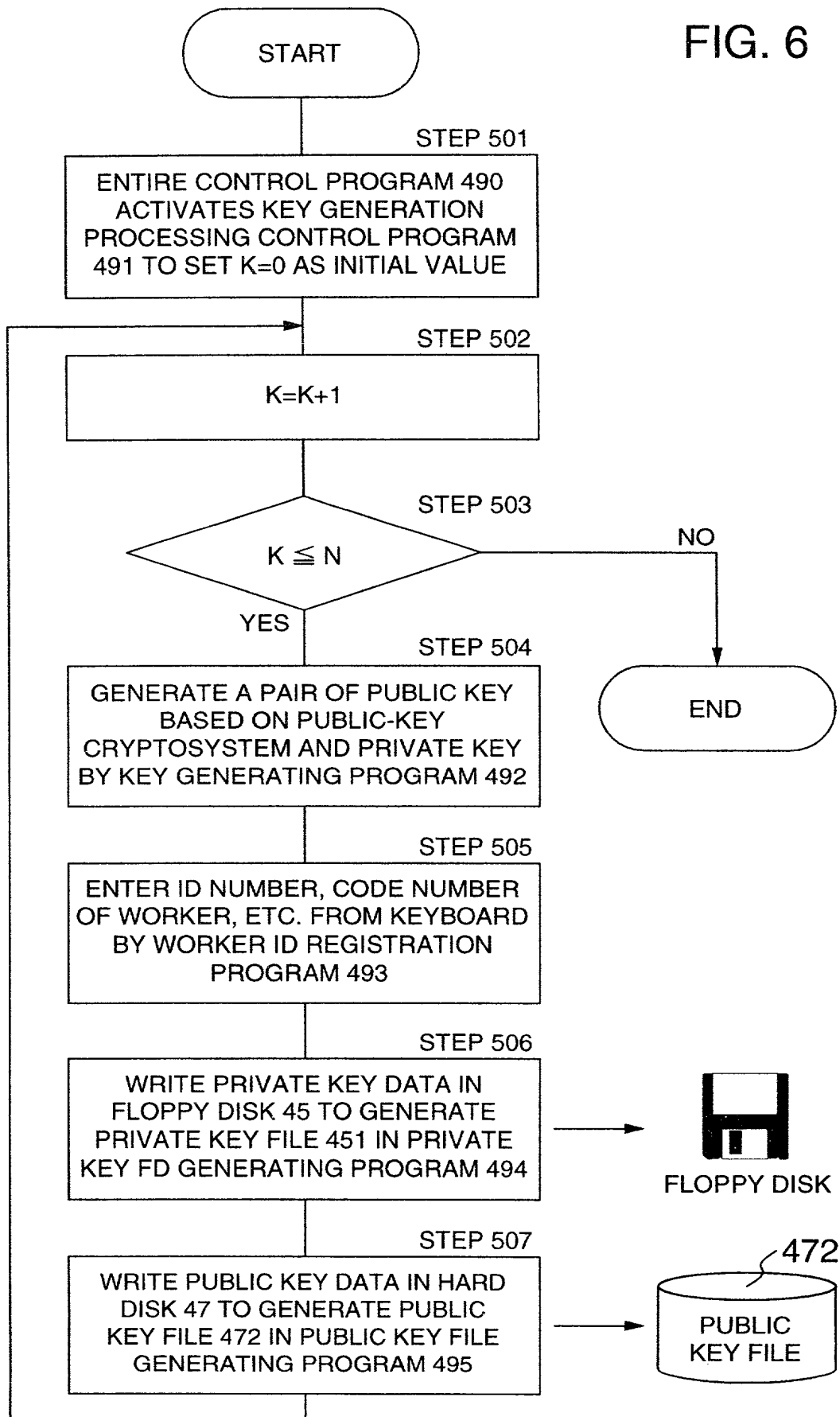


FIG. 7

PURCHASE ORDER FORM ~ 38

31 { CUSTOMER NAME

34 { ADDRESS

32 PURCHASE DATE

33 MEMBERSHIP NUMBER

35 PAYMENT CREDIT CARD NUMBER

371 { 372 { 373 { 374 { 375 { 376 {

COMMODITY NUMBER	TRADE NAME	UNIT COST	QUANTITY	MONEY AMOUNT	REMARK

36 { TOTAL MONEY AMOUNT

FIG. 8

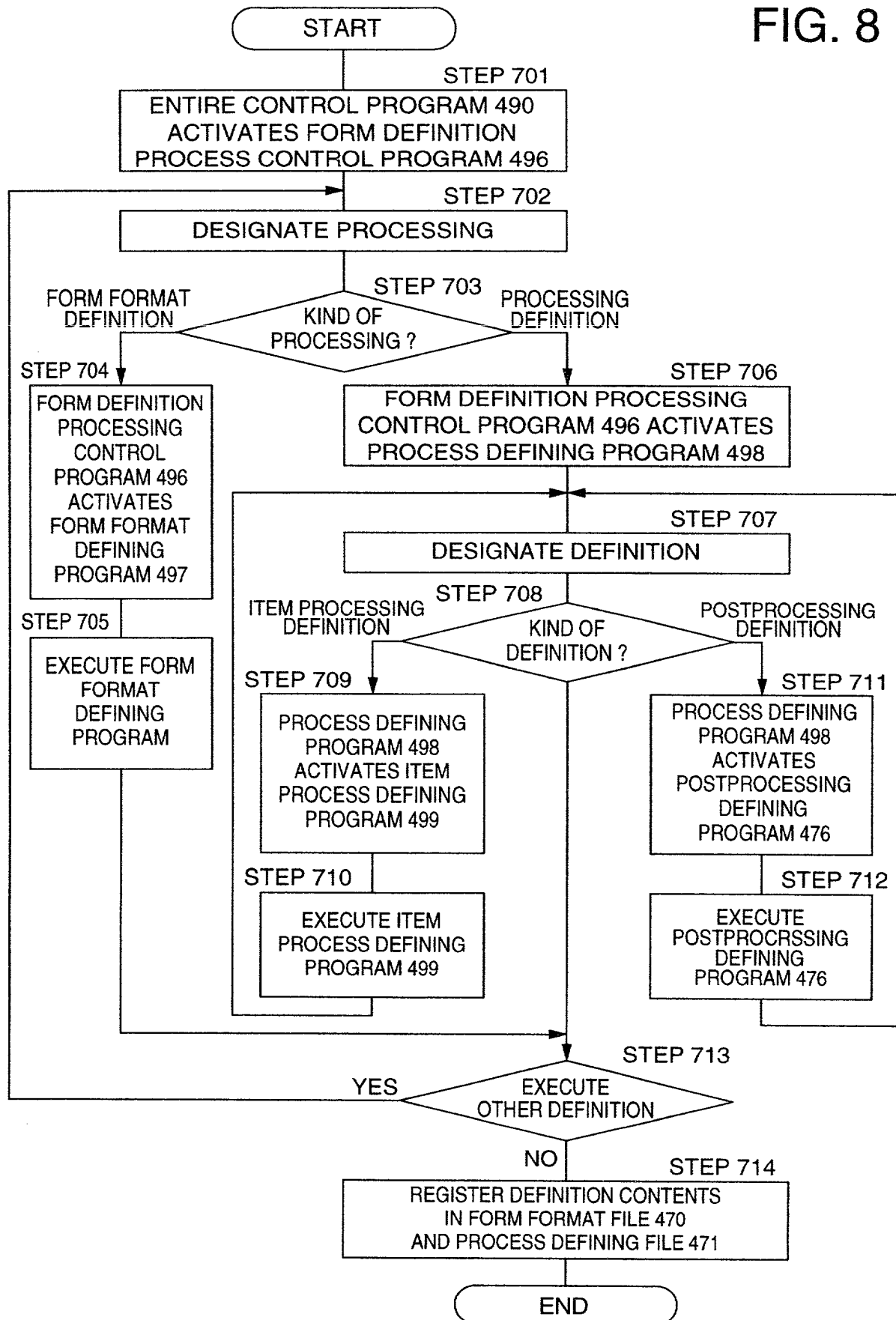


FIG. 10

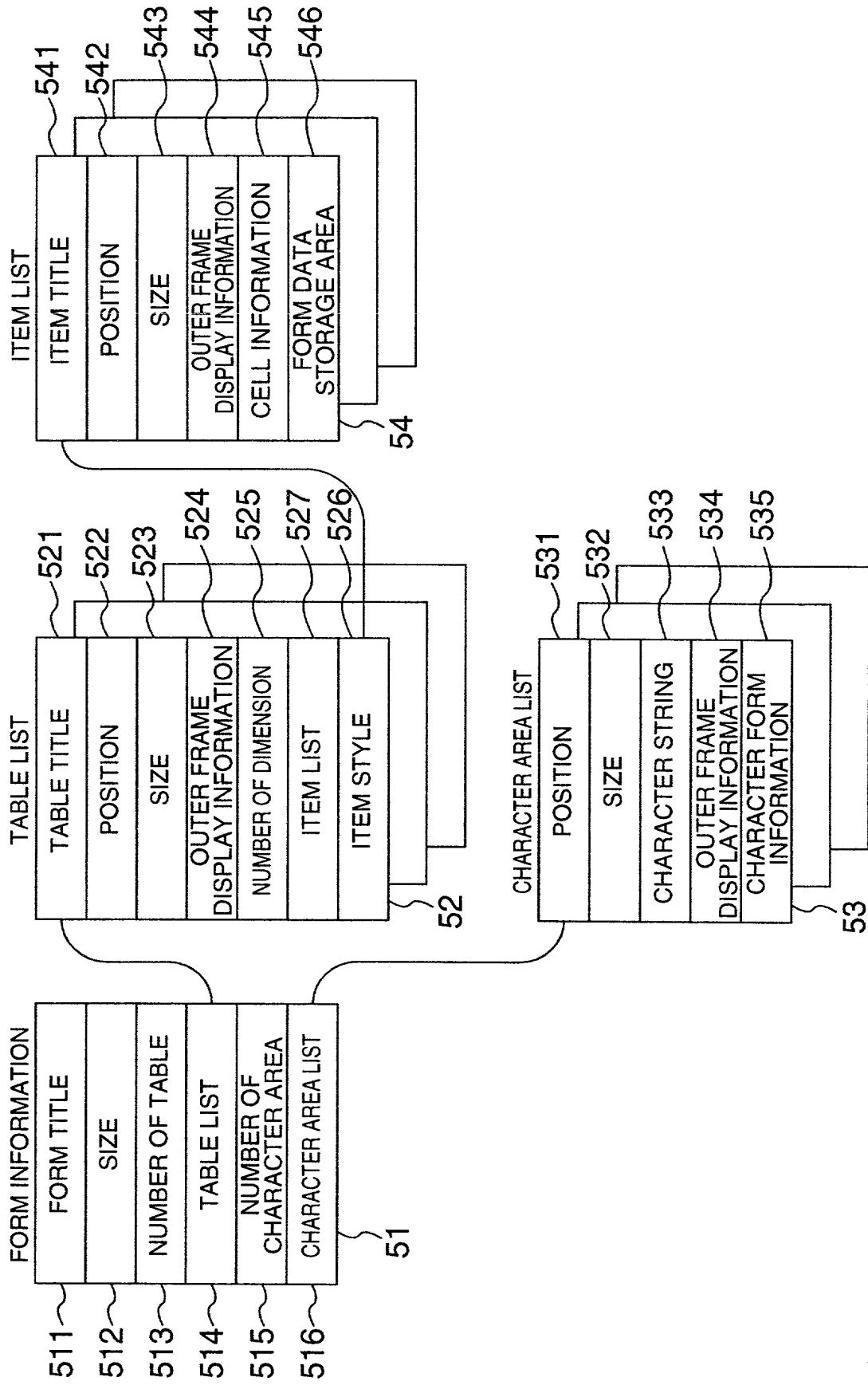


FIG. 11A

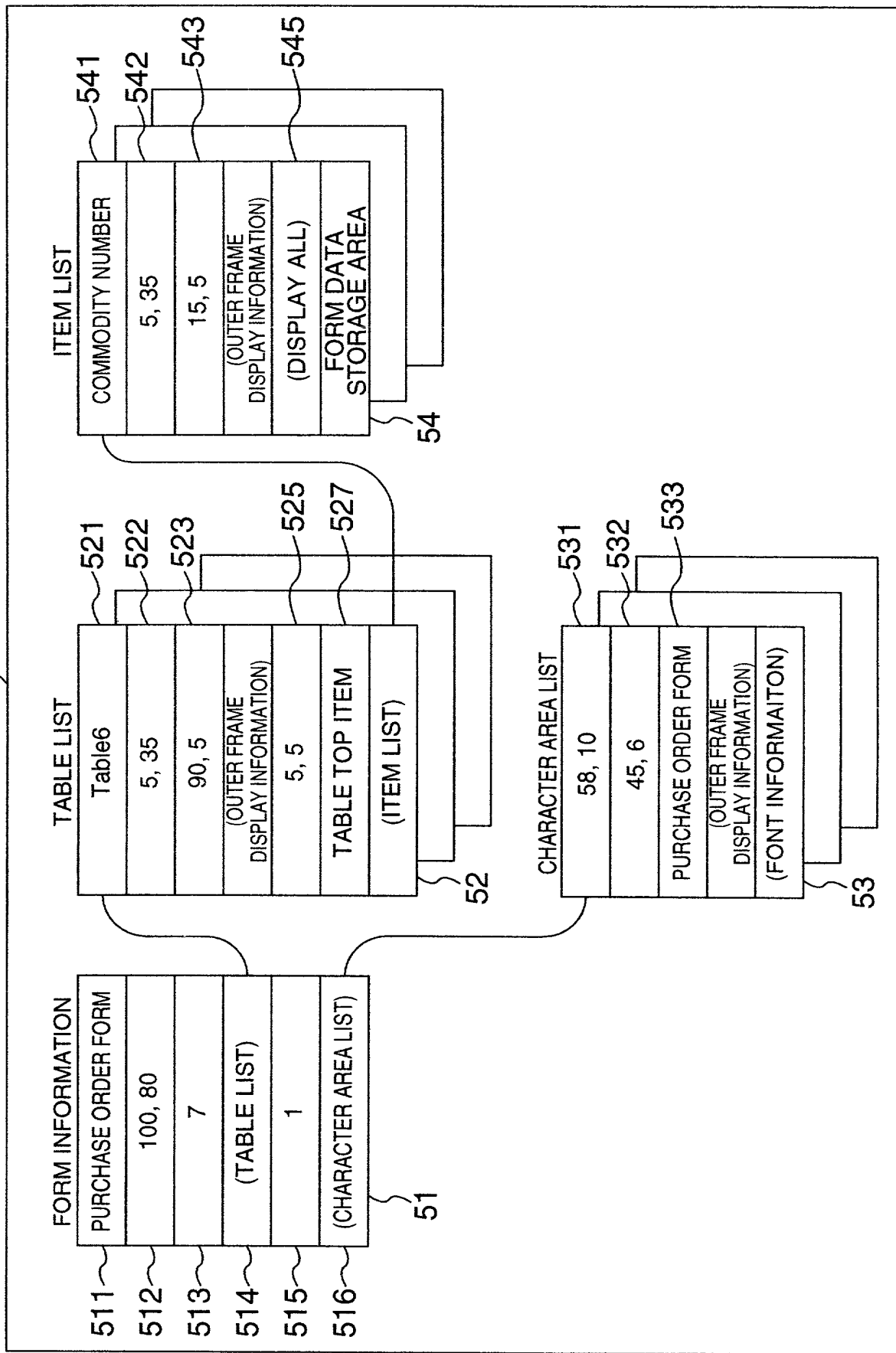


FIG.12

FILE		EDIT		LAYOUT		DISPLAY		PROCESSING		CREATE		ATTRIBUTE		OPTION		WINDOW		HELP	
<div> <div> <div>ITEM PROCESSING</div> <div>PRE-PROCESSING</div> <div>POST-PROCESSING</div> </div> <div> <div>31</div> <div>CUSTOMER NAME</div> </div> <div> <div>34</div> <div>ADDRESS</div> </div> <div> <div>371</div> <div>COMMODITY NUMBER</div> </div> <div> <div>372</div> <div>TRADE NAME</div> </div> <div> <div>373</div> <div>UNIT COST</div> </div> <div> <div>374</div> <div>QUANTITY</div> </div> <div> <div>375</div> <div>MONEY AMOUNT</div> </div> <div> <div>376</div> <div>REMARK</div> </div> <div> <div>30</div> <div>PURCHASE DATE</div> </div> <div> <div>32</div> <div>MEMBERSHIP NUMBER</div> </div> <div> <div>33</div> <div>PAYMENT CREDIT CARD NUMBER</div> </div> <div> <div>35</div> <div></div> </div> </div>																			
<div> <div>110</div> <div>ITEM PROCESSING</div> </div>																			
<div> <div>111</div> <div>CUSTOMER NAME=@SUBSTITUTE RETRIEVAL (MEMBERSHIP NUMBER)</div> </div> <div> <div>112</div> <div>ADDRESS=@SUBSTITUTE RETRIEVAL (MEMBERSHIP NUMBER)</div> </div> <div> <div>113</div> <div>MONEY AMOUNT=UNIT COST * QUANTITY</div> </div> <div> <div>114</div> <div>TRADE NAME=@SUBSTITUTE RETRIEVAL (COMMODITY NUMBER)</div> </div> <div> <div>115</div> <div>UNIT COST=@SUBSTITUTE RETRIEVAL (COMMODITY NUMBER)</div> </div> <div> <div>116</div> <div>OK</div> </div> <div> <div>117</div> <div>CANCEL</div> </div>																			

FIG.13

FILE EDIT LAYOUT DISPLAY PROCESSING DEFINITION CREATE ATTRIBUTE OPTION WINDOW HELP

ITEM PROCESSING
PRE-PROCESSING
POST-PROCESSING
SCRIPT
125
30

31
CUSTOMER NAME
32
PURCHASE DATE
33
MEMBERSHIP NUMBER
34
ADDRESS
35
PAYMENT CREDIT CARD NUMBER

371
COMMODITY NUMBER
372
TRADE NAME
373
UNIT COST
374
QUANTITY
375
MONEY AMOUNT
376
REMARK

36
TOTAL MONEY AMOUNT

120

ENCIPHERMENT ITEM

ENCIPHERMENT TARGET ITEM
121
126
PAYMENT CREDIT CARD NUMBER
QUANTITY
MONEY AMOUNT
TOTAL MONEY AMOUNT
127

FORM ITEM TITLE
122
123
FORM ITEM TITLE
PURCHASE DATE
MEMBERSHIP NUMBER
ADDRESS
PAYMENT CREDIT CARD
COMMODITY NUMBER
TRADE NAME
124

USED PUBLIC KEY ID : 1357 128

FIG. 14

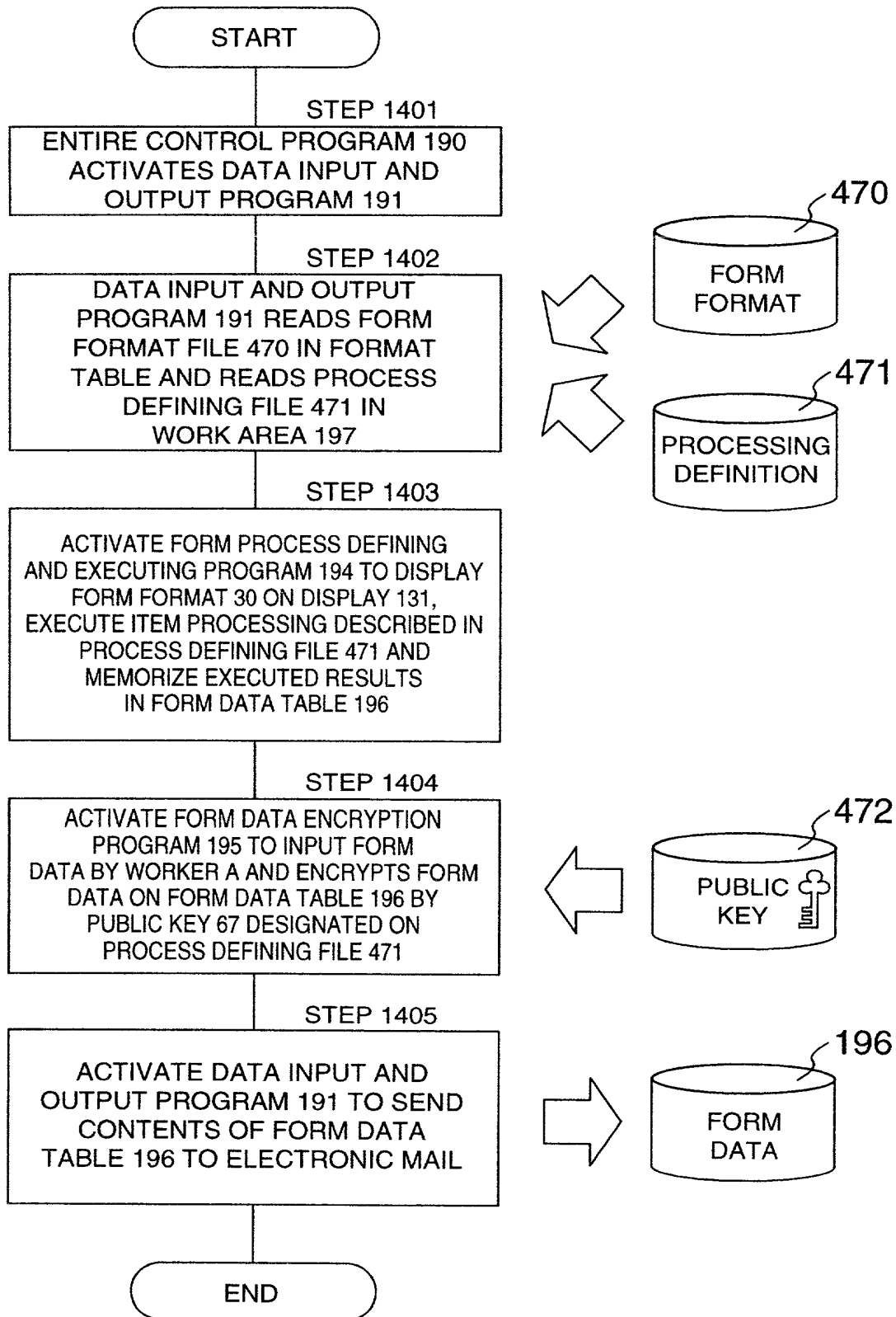


FIG. 15

31

CUSTOMER NAME

YAMADA TARO

34

ADDRESS

890 KASHIMADA,
SAIWAI-KU, KAWASAKI- SHI

32

PURCHASE DATE

1997, 10, 3

33

MEMBERSHIP NUMBER

001-549-1703

35

PAYMENT CREDIT CARD NUMBER

371

372

373

374

375

376

COMMODITY NUMBER	TRADE NAME	UNIT COST	QUANTITY	MONEY AMOUNT	REMARK
001	TOWEL GIFT SET	3000	5	15000	FAMILY CELEBRATION
005	FIRST-RATE JAPANESE THIN WHEAT NOODLES GIFT SET	5000	2	10000	SEASON'S GREETING

36

TOTAL MONEY AMOUNT

25000

FIG. 16

FORM DATA TABLE 196

1203	1357		1222
1204	YAMADA TARO	0	
1205	890 KASHIMADA SAIWAI-KU, KAWASAKI-SHI	0	
1205	1997, 10, 3	0	
1207	001-549-1703	0	
1208	1234-567890	1	
1209	001	0	
1210	TOWEL GIFT SET	0	
1211	3000	0	
1213	5	1	
1213	15000	1	
1214	FAMILY CELEBRATION	0	
1215	005	0	
1216	FIRST-RATE JAPANESE THIN WHEAT NOODLES GIFT SET	0	
1217	5000	0	
1218	2	1	
1219	10000	1	
1220	SEASON'S GREETING	0	
1221	25000	1	

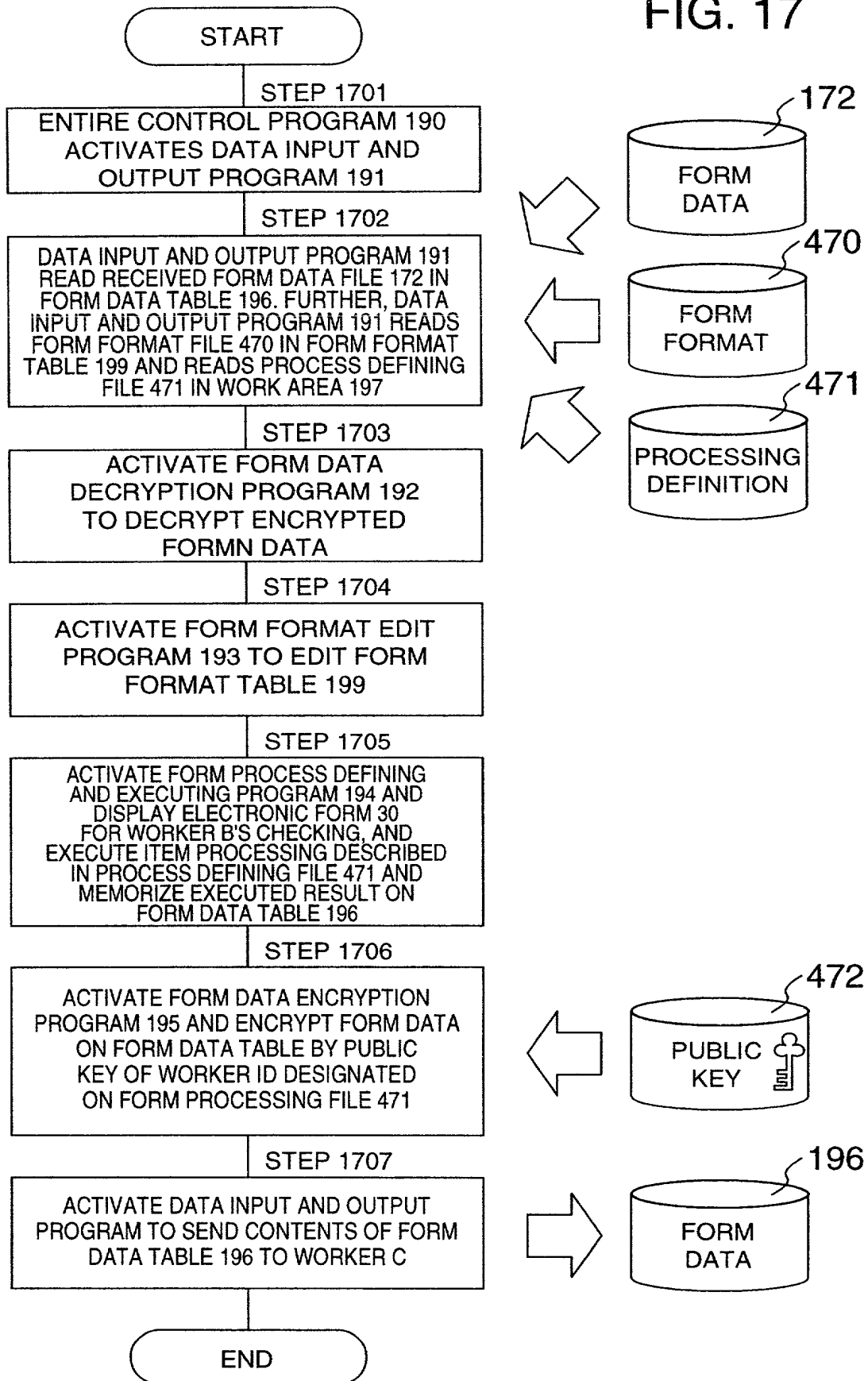


FIG. 18

PURCHASE ORDER FORM

CUSTOMER NAME

YAMADA TARO

ADDRESS

890 KASHIMADA,
SAIWAI-KU, KAWASAKI- SHI

PURCHASE DATE

1997, 10, 3

MEMBERSHIP NUMBER

001-549-1703

COMMODITY NUMBER	TRADE NAME	UNIT COST	REMARK
001	TOWEL GIFT SET	3000	FAMILY CELEBRATION
005	FIRST-RATE JAPANESE THIN WHEAT NOODLES GIFT SET	5000	SEASON'S GREETING

1800

36

FIG. 19

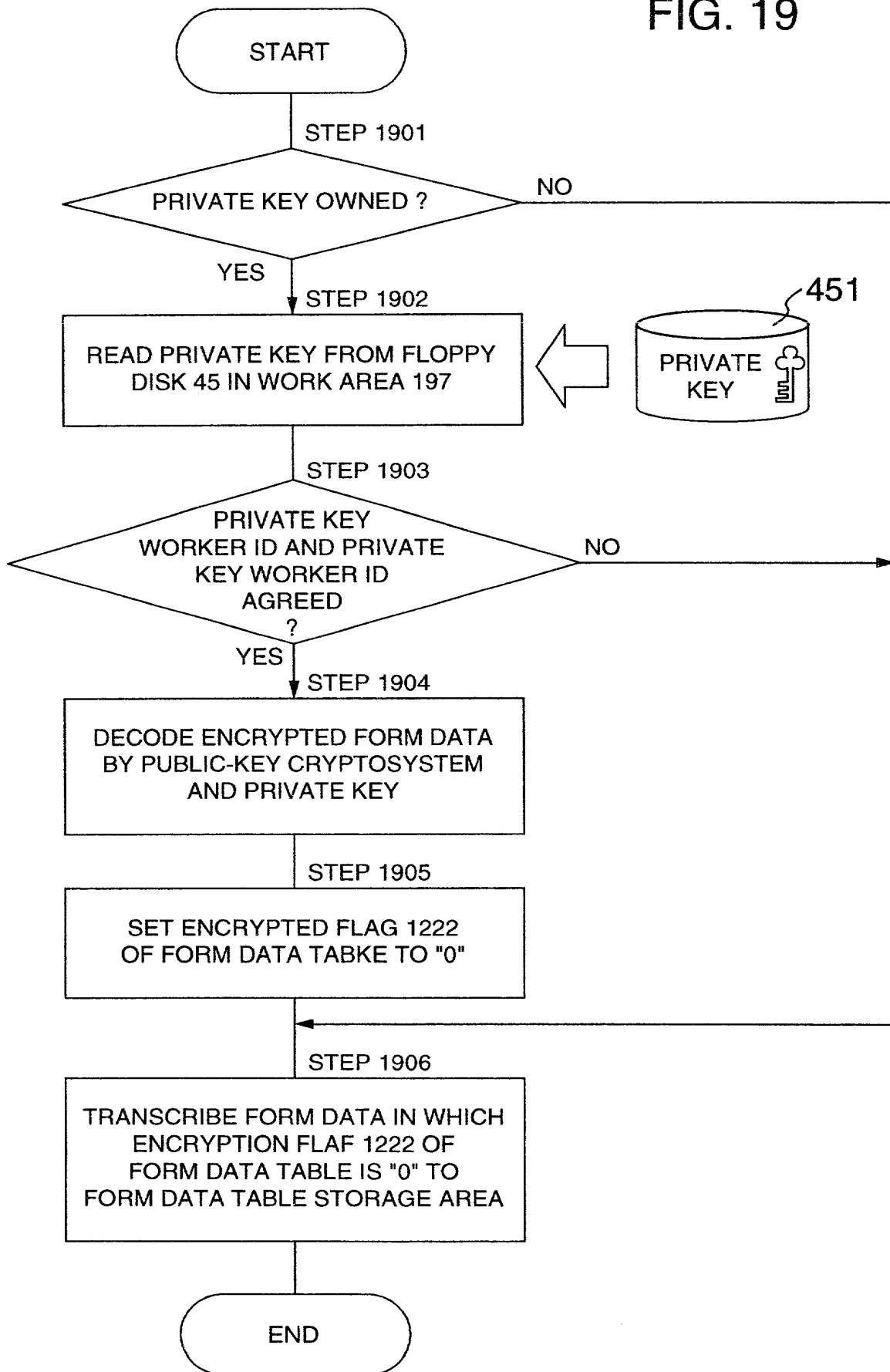


FIG. 20

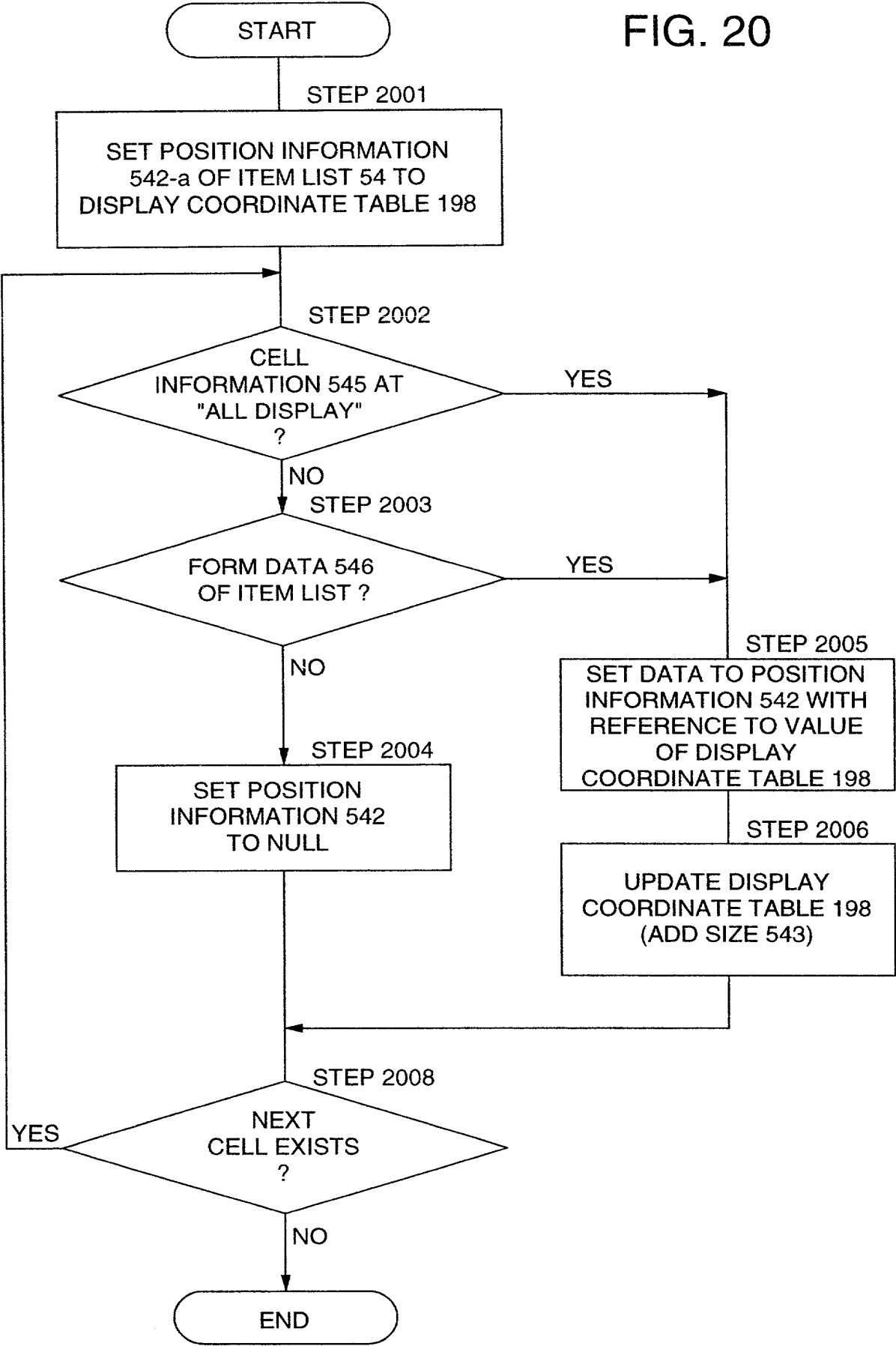


FIG. 21

BEFORE EDIT { 2101		AFTER EDIT { 2102	
541-a	COMMODITY NUMBER		COMMODITY NUMBER
542-a	5, 40		5, 40
543-a	15, 5		15, 5
	(OUTER FRAME DISPLAY INFORMATION)		(OUTER FRAME DISPLAY INFORMATION)
545-a	(ALL DISPLAY)		(ALL DISPLAY)
546-a	001		001
541-b	TRADE NAME		TRADE NAME
542-b	20, 40		20, 40
543-b	30, 5		30, 5
	(OUTER FRAME DISPLAY INFORMATION)		(OUTER FRAME DISPLAY INFORMATION)
545-b	(ALL DISPLAY)		(ALL DISPLAY)
546-b	TOWEL GIFT SET		TOWEL GIFT SET
541-c	UNIT COST		UNIT COST
	50, 40		50, 40
	10, 5		10, 5
	(OUTER FRAME DISPLAY INFORMATION)		(OUTER FRAME DISPLAY INFORMATION)
	(ALL DISPLAY)		(ALL DISPLAY)
546-c	3000		3000
541-d	QUANTITY		QUANTITY
542-d	60, 40	REWRITE	NULL
543-d	10, 5		10, 5
	(OUTER FRAME DISPLAY INFORMATION)		(OUTER FRAME DISPLAY INFORMATION)
545-d	ENCRYPTION/NULL		ENCRYPTION/NULL
546-d	?		?
	MONEY AMOUNT		MONEY AMOUNT
	70, 40	REWRITE	NULL
	15, 5		15, 5
	(OUTER FRAME DISPLAY INFORMATION)		(OUTER FRAME DISPLAY INFORMATION)
	ENCRYPTION/NULL		ENCRYPTION/NULL
	?		?
	REMARK		REMARK
	85, 40	REWRITE	60, 40
	10, 5		10, 5
	(OUTER FRAME DISPLAY INFORMATION)		(OUTER FRAME DISPLAY INFORMATION)
	(ALL DISPLAY)		(ALL DISPLAY)
	FAMILY CELEBRATION		FAMILY CELEBRATION

?: ENCRYPTED DATA

FIG. 22

CUSTOMER NAME

YAMADA TARO

ADDRESS

890 KASHIMADA,
SAIWAI-KU, KAWASAKI- SHI

PURCHASE DATE

1997, 10, 3

MEMBERSHIP NUMBER

001-549-1703

PAYMENT CREDIT CARD NUMBER

1234-567890

COMMODITY NUMBER

001

TRADE NAME

TOWEL GIFT SET

UNIT COST

3000

QUANTITY

5

MONEY AMOUNT

15000

REMARK

FAMILY CELEBRATION

COMMODITY NUMBER

005

TRADE NAME

FIRST-RATE JAPANESE THIN
WHEAT NOODLES GIFT SET

UNIT COST

5000

QUANTITY

2

MONEY AMOUNT

10000

REMARK

SEASON'S GREETING

COMMODITY NUMBER

TRADE NAME

UNIT COST

QUANTITY

MONEY AMOUNT

REMARK

COMMODITY NUMBER

TRADE NAME

UNIT COST

QUANTITY

MONEY AMOUNT

REMARK

COMMODITY NUMBER

TRADE NAME

UNIT COST

QUANTITY

MONEY AMOUNT

REMARK

TOTAL MONEY AMOUNT

25000

2300